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Application Serial No.: 09/910,684 Attorney Docket No.: 0190151

REMARKS

This Amendment and Response is in response to the *Non-Final* Office Action of August 22, 2005, where the Examiner has rejected claims 1, 2, 4-9, 12, 14-18 and 20-21. By the present amendment, claims 1 and 12 have been amended, and new claims 22-24 have been added. After the present amendment, claims 1, 2, 4-9, 12, 14-18 and 20-24 are pending in the present application. Reconsideration and allowance of outstanding claims 1, 2, 4-9, 12, 14-18 and 20-24 in view of the following remarks are requested.

A. Rejection of Claims 1, 2, 4-9, 12, 14-18 and 20-21 under 35 USC §102(b)

The Examiner has rejected claims 1, 2, 4-9, 12, 14-18 and 20-21, under 35 USC §102(b), as being anticipated by Anesko, et al. (USPN 5,987,178) ("Anesko").

Applicant appreciates the Examiner's time and courteous discussion with the undersigned regarding the pending claims and Anesko. As discussed with the Examiner, Anesko fails to disclose, teach or suggest "wherein, according to the rearranged form, all pixels of any one of the plurality of groups of pixels can be read during a single read cycle from the staging memory to a temporary memory, wherein each group of some of the plurality of groups of pixels corresponds to a new row and each group of some other of the plurality of groups of pixels corresponds to a new column," as recited in claim 21.

As disclosed in Anesko, a parallel read can be made of all the pixels in one row, but not in both row and column. This can be well understood with a reference to FIG. 4 of the present application, which shows a conventional arrangement of pixels. As shown,

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one row of pixels can be read in one read access cycle without rearrangement, but sixteen

read access cycles (8x16 block) are needed to read all the pixels in one column.

This shortcoming of the conventional approach or Anesko, that can read the pixels

in one read access cycle in a single dimension, has been overcome by the invention of

claim 21, where the pixels can be read in one read access cycle in either dimension, i.e.

both row and column. Anesko does not show that all the pixels in a column can be read

in one read access cycle. In Anesko, the pixels can be read in one read access cycle in

one dimension only, i.e. one row; whereas, with the invention of claim 21, pixels in the

staging memory are rearranged such that the pixels can be read in one read access cycle in

either dimension, i.e. both row and column, for example, see FIGs. 7a and 7b (for reading

a column) and FIG. 8 (for reading a row). As shown in FIGs. 7a and 7b, the circled pixel

data, which correspond to one column, can be read in one read access cycle. Further, as

shown in FIG. 8, the circled pixel data, which correspond to one row, can also be read in

one read access cycle. Therefore, it is respectfully submitted that independent claim 21 is

patentably distinguishable over Anesko and should be allowed.

Further, independent claims I and 12 have been amended to recite "wherein at

least one of the P groups of L pixels corresponds to a new row of said block of pixels and

at least one of the P groups of L pixels corresponds to a new column of said block of

pixels." For the reasons stated above in conjunction with patentability of claim 21, it is

respectfully submitted that claims 1 and 12 are also patentably distinguishable over

Anesko, because in contrast with Anesko, pixels in the staging memory of claims 1 and

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12 are rearranged such that the pixels can be read in one read access cycle in either

dimension, i.e. both row and column, as opposed to only the row in Anesko.

Accordingly, it is respectfully submitted that independent claims 1, 12 and 21, and

their respective dependent claims 2, 4-9, 14-18 and 20, should be allowed.

B. Rejection of Claim 15 under 35 USC §103(a)

The Examiner has rejected claim 15, under 35 USC §103(a), as being unpatentable

over Anesko in view of Kalapathy (USPN 5,799,169) ("Kalapathy). It is respectfully

submitted that claim 15 should be allowed at least for the same reasons stated above in

conjunction with patentability of claim 12.

C. Rejection of Claim 20 under 35 USC §103(a)

The Examiner has rejected claim 20, under 35 USC §103(a), as being unpatentable

over Anesko in view of Maturi, et al. (USPN 5,731,850) ("Maturi"). It is respectfully

submitted that claim 20 should be allowed at least for the same reasons stated above in

conjunction with patentability of claim 12.

D. New Claims 22-24

By the present amendment, applicant has added new dependent claims 22, 23 and

24, which depend from claims 1, 12 and 21, respectively. Claims 22, 23 and 24 include

similar limitations. For example, claim 23 recites "wherein said NxM pixels are

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rearranged such that pixels of one of said new row and new column are stored in the

staging memory in a sequential pattern and pixels of the other one of said new row and

new column are stored in the staging memory in a non-sequential pattern." These

limitations are supported, for example, at page 10, lines 24-26 and FIGs. 7a and 7b. It is

respectfully submitted that Anesko fails to disclose, teach or suggest such limitations.

E. Conclusion

Based on the foregoing reasons, an early Notice of Allowance directed to all claims 1, 2, 4-9, 12, 14-18 and 20-24 pending in the present application is respectfully

requested.

Respectfully Submitted, FARJAMI & FARJAMI LLP

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